

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application. Added text is indicated by underlining, deleted text is indicated by ~~striketrough~~. Changes are identified by a change bar in the margin.

Listing of Claims:

Claims 1-22 (canceled)

1 23. (currently amended) A storage system comprising:
2 a first I/O port for connection to a communication network;
3 at least a second I/O port separate from the first I/O port for connection to the
4 communication network, the first and second I/O ports each receiving write requests;
5 an array of media for storing information, the array comprising a plurality of disk
6 storage units organized into a plurality of logical disks;
7 a plurality of data paths, each data path being selectively connectable between any
8 one of the logical disks and any one of the I/O ports;
9 a configuration table that identifies the logical disks for connection with the I/O
10 ports;
11 an allocator to allocate one of the data paths between one of the logical disks and
12 one of the I/O ports based upon a data rate capability of said one data path determined from
13 communication speed information of the configuration table to thereby provide a desired quality
14 of service.

1 24. (previously presented) A storage system as in claim 23 wherein the array of
2 media includes media having different operational characteristics, and wherein the storage
3 system allocates individual ones of the array of media to individual ones of the data paths to
4 provide the desired quality of service.

1 25. (canceled)

1 26. (previously presented) A storage system as in claim 24 wherein the array of
2 media comprise hard disk drives, and the different operational characteristics comprise different
3 communication speeds of operation.

1 27. (previously presented) A storage system as in claim 24 wherein the storage
2 system allocates ones of the array of media based upon a data rate capability of the media and a
3 data rate capability of a communication link coupled to one of the data paths.

1 28. (previously presented) A storage system as in claim 24 wherein the desired
2 quality of service comprises a specified bandwidth and wherein the storage system allocates
3 individual ones of the array of media based upon a guaranteed bandwidth.

1 29. (currently amended) A storage system comprising:
2 an array of storage media;
3 at least a first I/O port and a second I/O port separate from the first I/O port, each
4 having a network connection operable to connect the array to a network with a desired quality of
5 service;

6 | a configuration table that identifies logical disks of the array for connection with
7 | the I/O ports;

8 | a plurality of data paths to selectively couple the I/O ports to the storage media,
9 wherein a data path between one or more of the array of storage media and the network
10 | connection is selected in accordance with data rate capability determined from communication
11 | speed information of the configuration table to ~~provide sufficient data speed to accommodate~~
12 | provide the desired quality of service.

1 30. (currently amended) A method for allocating resources in a storage system,
2 the storage system comprising a first of I/O port and a second I/O port separate from the first I/O
3 port and an array of storage devices coupled to a network connection by data paths, the method
4 comprising:

5 establishing a data path between a storage device of the array and one of the I/O
6 ports, wherein said one of the I/O ports is coupled to the network connection; the data path being
7 selected in accordance with data rate capability determined from communication speed
8 information from a configuration table that identifies logical disks of the array for connection
9 with the I/O ports to provide a desired quality of service ~~sufficient data speed based upon data~~
10 ~~capacity of the storage device and data rate capability of the network connection determined in~~
11 ~~accordance with communication speed information from a configuration table; and~~
12 selecting a storage device of the array based upon the data capacity and the data
13 ~~rate capability of the network connection.~~

1 31. (previously presented) The method of claim 30 wherein the step of
2 establishing the data path comprises assigning a data path having a sufficient data speed to
3 accommodate the desired quality of service.

1 32. (previously presented) The method of claim 30 wherein the step of
2 establishing a data path comprises searching for unallocated data communications resources to
3 accommodate a data capacity of the array.

1 33. (currently amended) The method of claim ~~30~~ 37, wherein the step of
2 selecting ones of the array comprises searching for unallocated ones of the array having a
3 sufficient data capacity to match a data rate capability of the network connection.

1 34. (previously presented) A storage system as in claim 23 wherein the
2 configuration table includes information relating to data rate capability of the I/O ports and the
3 logical disks.

1 35. (previously presented) A storage system as in claim 29 wherein the
2 configuration table includes information relating to data rate capability of the I/O ports and the
3 array of storage media.

1 36. (previously presented) The method of claim 30 wherein the configuration
2 table includes information relating to data rate capability of the I/O ports and the array of storage
3 devices.

1 37. (new) The method of claim 30, further comprising:
2 selecting a storage device of the array based upon data capacity of the storage
3 device and data rate capability of the network connection.

1 38. (new) A storage system as in claim 23, wherein the allocator further allocates
2 the data path by assigning a data path having a sufficient data speed to accommodate the desired
3 quality of service.

1 39. (new) A storage system as in claim 23, wherein the allocator further allocates
2 the data path by searching for unallocated data communications resources to accommodate a data
3 capacity of the array.

1 40. (new) A storage system as in claim 23, wherein the allocator further allocates
2 the data path by selecting a storage device of the array based upon data capacity of the storage
3 device and data rate capability of the network connection.

1 41. (new) A storage system as in claim 40, wherein the allocator selects ones of
2 the array by searching for unallocated ones of the array having a sufficient data capacity to match
3 a data rate capability of the network connection.

1 42. (new) A storage system as in claim 29, wherein the array of media includes
2 media having different operational characteristics, and wherein the storage system allocates
3 individual ones of the array of media to individual ones of the data paths to provide the desired
4 quality of service.

1 43. (new) A storage system as in claim 29, wherein the array of media comprise
2 hard disk drives, and the different operational characteristics comprise different communication
3 speeds of operation.

1 44. (new) A storage system as in claim 29, wherein the storage system allocates
2 ones of the array of media based upon a data rate capability of the media and a data rate
3 capability of a communication link coupled to one of the data paths.

1 45. (new) A storage system as in claim 29, wherein the desired quality of service
2 comprises a specified bandwidth and wherein the storage system allocates individual ones of the
3 array of media based upon a guaranteed bandwidth.